

# [ELECTROSTATIC DISCHARGE PROTECTION CIRCUIT]

## Abstract

An electrostatic discharge (ESD) protection circuit is disclosed, which comprises a first common conductive line, a first diode, a P-type transistor and an N-type transistor. A cathode of the first diode is coupled to the first common conductive line, and an anode of the first diode is coupled to the first system voltage. A first S/D terminal and a gate terminal of the first P-type transistor is coupled to the first system voltage and a second S/D terminal of the first P-type transistor is coupled to the first pad. A first S/D terminal of the first N-type transistor is coupled to the first common conductive line, a gate terminal of the first N-type transistor is coupled to the first ground voltage, and a second S/D terminal of the first N-type transistor is coupled to the first pad. Therefore, the present invention can efficiently introduce the ESD pulse from a pad to a system voltage or another pad for protecting the internal circuit from damage.